



2631

PATENT

Case Docket No. DATUMTE.006A

Date: April 18, 2001

0400
#2
ID

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : William Dean Warner, et al.
Appl. No. : 09/771,144
Filed : January 26, 2001
For : WIDEBAND ANALOG
QUADRATURE
MODULATOR/DEMODULA
TOR WITH PRE-
COMPENSATION/POST-
COMPENSATION
CORRECTION
Examiner : Unknown
Group Art Unit : Unknown

I hereby certify that this correspondence and all
marked attachments are being deposited with the
United States Postal Service as first class mail in
an envelope addressed to: Assistant Commissioner
for Patents, Washington, D.C. 20231, on

April 18, 2001

(Date)

Michael S. Okamoto, Reg. No. 47,831

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TRANSMITTAL LETTER

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231
ATTENTION: APPLICATION BRANCH

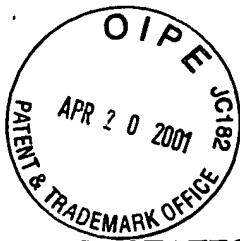
Dear Sir:

Enclosed for filing in the above-identified application are:

- (X) An Information Disclosure Statement.
- (X) A PTO Form 1449 with twenty-three (23) references.
- (X) The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to Account No. 11-1410.
- (X) Return prepaid postcard.

Michael S. Okamoto
Registration No. 47,831
Attorney of Record

DATUMTE.006A



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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Examiner	:	Unknown)	
)	

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INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

We are enclosing a form PTO-1449 listing twenty-three (23) references that are also enclosed. This Information Disclosure Statement is being filed within three months of the filing date of this application, and no fee is required in accordance with 37 C.F.R. § 1.97(b)(1).

Identification herein is not an admission that any of the foregoing references are prior art to the above-captioned application.

Appl. No. : 09/771,144
Filed : January 26, 2001

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

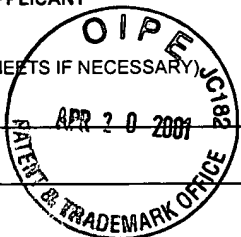
Dated: April 18, 2001

By: Michael Okamoto

Michael S. Okamoto
Registration No. 47,831
Attorney of Record
620 Newport Center Drive
Sixteenth Floor
Newport Beach, CA 92660
(949) 760-0404

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FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. DATUMTE.006A	APPLICATION NO. 09/771,144
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (USE SEVERAL SHEETS IF NECESSARY)		APPLICANT William Dean Warner, et al.	
		FILING DATE January 26, 2001	GROUP Unknown



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U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
	3,950,750	4/13/76	Churchill, et al.			
	4,003,054	1/11/77	Goldstone			
	5,369,411	11/29/94	Lisle, Jr.			
	5,381,108	1/10/95	Whitmarsh, et al.			
	5,872,538	2/16/99	Fowler			

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	WO 98/32221	7/23/98	PCT				

EXAMINER
INITIAL

OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)

	A.I. Sinsky, et al., <i>Error Analysis of a Quadrature Coherent Detector Processor</i> , IEEE Transactions On Aerospace and Electronic Systems, November 1974, pp. 880-883.
	F.E. Churchill, et al., <i>The Correction of I and Q Errors in a Coherent Processor</i> , IEEE Transactions On Aerospace And Electronic Systems, Vol. AES-17, No. 1, January 1981, pp. 131-137.
	J. Roome, <i>Analysis of quadrature detectors using complex envelope notation</i> , IEEE Proceedings, Vol. 136, Pt. F, No. 2, April 1989, pp. 95-100.
	M. Faulkner, et al., <i>Automatic Adjustment Of Quadrature Modulators</i> , Electronics Letters, Vol. 27, No. 3, January 31, 1991, pp. 214-216.
	J.K. Cavers, et al., <i>Adaptive Compensation for Imbalance and Offset Losses in Direct Conversion Transceivers</i> , IEEE Transactions On Vehicular Technology, Vol. 42, No. 4, November 1993, pp. 581-588.
	A. Lohtia, et al., <i>An Adaptive Digital Technique For Compensating For Analog Quadrature Modulator/Demodulator Impairments</i> , IEEE Pac Rim 1993, pp. 447-450.
	M. Faulkner, et al., <i>Adaptive Linearization Using Predistortion - Experimental Results</i> , IEEE Transactions On Vehicular Technology, Vol. 43, No. 2, May 1994, pp. 323-332.
	A. Mansell, et al., <i>Practical Implementation Issues For Adaptive Predistortion Transmitter Linearisation</i> , IEE, 1994.
	S.A. Leyonhjelm, et al., <i>The Effect of Reconstruction Filters on Direct Upconversion in a Multichannel Environment</i> , IEEE Transactions On Vehicular Technology, Vol. 44, No. 1, February 1995, pp. 95-102.
	A. Lohtia, et al., <i>Adaptive digital linearization of RF power amplifiers</i> , Can. J. Elect. & Comp Eng., Vol. 20, No. 2, 1995.
	J.K. Cavers, <i>A Fast Method for Adaptation Of Quadrature Modulators And Demodulators In Amplifier Linearization Circuits</i> , IEEE 1996, pp. 1307-1311.
	G. Yang, et al., <i>I/Q Modulator Image Rejection Through Modulation Pre-distortion</i> , IEEE 1996, pp. 1317-1320.
	J.K. Cavers, <i>The Effect of Quadrature Modulator and Demodulator Errors on Adaptive Digital Predistorters for Amplifier Linearization</i> , IEEE Transactions On Vehicular Technology, Vol. 46, No. 2, May 1997, pp. 456-466.

EXAMINER

DATE CONSIDERED

*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. DATUMTE.006A	APPLICATION NO. 09/771,144
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EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
	K. J. R. New Methods for Adaptation of Quadrature Modulators and Demodulators in Amplifier Linearization Circuits, IEEE Transactions On Vehicular Technology, Vol. 46, No. 3, August 1997, pp. 707-716.
	K. Gerlach, et al., An Adaptive Matched Filter that Compensates for I, Q Mismatch Errors, IEEE Transactions On Signal Processing, Vol. 45, No. 12, December 1997, pp. 3104-3107.
	R. Marchesani, Digital Precompensation of Imperfections in Quadrature Modulators, IEEE Transactions On Communications, Vol. 48, No. 4, April 2000, pp. 552-556.
	J.D. Owen, A Comparison Of Wide Bandwidth Quadrature Demodulators Using Computer Modelling, date and origin not known.

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